RTIP ID# *(required)* ORA111801

TCWG Consideration Date September 25, 2012

Project Description

The Orange County Transportation Authority (OCTA), in cooperation with the California Department of Transportation (Caltrans), the City of Lake Forest, the City of Laguna Hills, the City of Laguna Niguel, and the City of Mission Viejo, is proposing to widen Interstate 5 (I-5) between State Route 73 (SR-73) and El Toro Road; refer to Figure 1 (Project Location). The project objectives are to maximize overall performance within the project limits; reduce congestion on I-5 within the project limits; provide intermittent auxiliary lanes, where needed, to relieve congestion at diverge and merge locations; minimize right-of-way acquisition; and relieve congestion within interchange areas, on- and off-ramps, and local intersections. The project limits on I-5 extend from 0.5 mile (mi) south of the SR-73 interchange (PM 12.4) to 0.2 mi north of the El Toro Road Undercrossing (UC) (PM 18.9). The proposed project will add general purpose lanes in each direction on I-5 between Avery Parkway and Alicia Parkway, extend the 2nd High Occupancy Vehicle (HOV) lane from Alicia Parkway to El Toro Road, reestablish existing auxiliary lanes and construct new auxiliary lanes, and improve several existing on- and off-ramps.

Three alternatives, including the No Build Alternative, will be analyzed as a part of the Draft Initial Study/Environmental Assessment (IS/EA). The project alternatives are described below.

Alternative 1 – No Build

The no build alternative proposes no improvements to I-5, maintaining the existing four general purpose lanes and one HOV lane throughout the project limits in the northbound (NB) and southbound (SB) directions. All freeway facilities would remain as is, with the exception of proposed projects that are under development or currently in construction.

Alternative 2

Alternative 2 proposes to remove the existing I-5 paved shoulders and construct new traveled way and new shoulder pavement to the outside of the NB and SB lanes to accommodate one additional general purpose lane from Avery Parkway to Alicia Parkway. Full standard widths are proposed, including a 10-foot inside shoulder, 12-foot HOV lane, five 12-foot general purpose lanes, and a 10-foot outside shoulder throughout the majority of the project limits. No buffer is proposed between the HOV lane and general purpose lanes, which will accommodate continuous access throughout the project limits.

This alternative also proposes the extension of the second HOV lane from the Alicia Parkway interchange area to where it currently terminates at the El Toro Road UC. In this section, full standard widths are proposed as well. The centerline of I-5 is proposed to be shifted to the west in this area to accommodate the widening, which requires minor realignment of Avenida de la Carlota.

Auxiliary Lanes

Existing auxiliary lanes through the project limits are proposed to be reestablished and new auxiliary lanes will be constructed at the following locations:

- To Avery Parkway NB off-ramp.
- Between Oso Parkway NB on-ramp and La Paz Road NB off-ramp.
- Between La Paz Road NB on-ramp and Alicia Parkway NB off-ramp.
- Between Oso Parkway SB on-ramp and Crown Valley Parkway SB off-ramp (existing auxiliary lane is not continuous), as well as add a second auxiliary lane (for 1,500 feet) to Crown Valley Parkway SB off-ramp.
- Between La Paz Road SB on-ramp and Oso Parkway SB off-ramp (existing auxiliary lane is not continuous).
- Between El Toro Road SB on-ramp and Alicia Parkway SB off-ramp (existing auxiliary lane is not continuous; 2nd

auxiliary will also be reestablished).

Avery Parkway Interchange Improvements

In addition to providing an additional general purpose lane to the I-5/Avery Parkway interchange, the interchange configuration will also be improved. There are two options under consideration for improvement of the interchange, both of which require replacement of the Avery Parkway UC structure.

Design Option A – Modified Tight Diamond Interchange

Under this option, the on- and off-ramps at Avery Parkway will be realigned and the NB off-ramp will be widened to three lanes at the intersection with Avery Parkway. Similarly, the NB on-ramp would be widened to three lanes and the SB off-ramp would be widened to four lanes at the intersection. The SB off-ramp would be improved to two lanes at the diverge from I-5, with one mainline auxiliary lane for the second lane. The overall configuration of the interchange will be similar to the existing configuration. Additionally, Avery Parkway will be improved under the structure to provide side-by-side dual left-turn lanes to both the NB and SB on-ramps and three through lanes in the EB and WB directions. This alternative will incorporate an interconnect line to optimize signal timing and operations for the closely spaced intersections at the interchange. Standard outside shoulders (which would accommodate bicycles) will be provided throughout the majority of the interchange in the EB and WB directions. Sidewalk will be provided through the interchange in the EB and WB directions.

Design Option B – SB Hook On- and Off-Ramps

Under this option, an SB hook off-ramp and SB hook on-ramp will be added to allow for the removal of the existing left-turn lane for traffic accessing SB I-5. The hook ramps would provide access to SB I-5 from Camino Capistrano, just south of the Camino Capistrano/Avery Parkway intersection. The SB off-ramp would be improved to two lanes at the diverge from I-5, as described under Design Option A. (The NB ramps would maintain the same improved configuration described under Design Option A.) Avery Parkway will be improved under the structure to provide dual left-turn lanes to the NB on-ramp and three through lanes in the EB and WB directions. Standard outside shoulders (which would accommodate bicycles) will be provided throughout the majority of the interchange in the EB and WB directions. Sidewalks will be provided through the interchange in the EB and WB directions.

La Paz Road Interchange Improvements

In addition to providing an additional general purpose lane within the I-5/La Paz Road interchange, capacity will also be added to La Paz Road, requiring replacement of the La Paz Road UC structure. The overall configuration of the interchange will remain the same, but La Paz Road will be improved under the structure to provide two through lanes in each direction, as well as right-turn lanes to the NB and SB loop on-ramps. Bicycle lanes and standard outside shoulders will be provided throughout the majority of the interchange in the EB and WB directions. Sidewalk will be provided through the interchange in the EB and WB directions.

Ramps

All ramps within the project limits will be modified in order to accommodate the additional general purpose lane, which include improvements ranging from restriping to complete reconstruction. Specifically, ramp modifications under this alternative include:

Avery Parkway

- Modify ramps as described in Design Options A and B above.

Crown Valley Parkway

- Realign, reconstruct, and widen NB off-ramp.

- Realign and reconstruct NB loop on-ramp and directional on-ramp.
- Realign, reconstruct, and widen SB off-ramp.
- Realign and reconstruct SB on-ramp.

Oso Parkway

- Realign and reconstruct NB off-ramp, loop on-ramp, and directional on-ramp.
- Realign and reconstruct SB off-ramp, loop on-ramp, and directional on-ramp.

La Paz Road

- Realign, reconstruct, and widen NB off-ramp, NB loop on-ramp, and directional on-ramp.
- Realign, reconstruct, and widen SB off-ramp, SB loop on-ramp, and directional on-ramp.

Alicia Parkway

- Realign, reconstruct, and widen NB off-ramp.
- Realign and reconstruct NB loop on-ramp and directional on-ramp.
- Realign, reconstruct, and widen SB off-ramp.
- Realign and reconstruct SB loop on-ramp and SB directional on-ramp.

El Toro Road

- Realign, reconstruct, and widen NB off-ramp.
- Realign and reconstruct NB loop on-ramp and NB directional on-ramp.
- Realign and restripe SB off-ramp.
- Realign and reconstruct SB loop on-ramp and directional on-ramp.

Structures

Avery Parkway UC (Bridge No. 55-0232)

This alternative proposes to replace the Avery Parkway UC structure to accommodate the wider Avery Parkway cross-section under the structure and to improve the existing non-standard vertical clearance of 14'8" with the minimum required 15'. In order to achieve minimum vertical clearance for this structure, a two-span structure is proposed to minimize the structure depth and the Avery Parkway profile will be lowered through the interchange area. Additionally, to ensure that all existing mainline lanes are open through construction, the I-5 centerline will be realigned easterly approximately 40 feet through the interchange.

Crown Valley Parkway (Bridge No. 55-0444)

- Tie-back walls for NB and SB I-5.

Oso Creek (Bridge No. 55-0233)

- Structure widening for NB and SB I-5.

Oso Parkway (Bridge No. 55-0509)

- Tie-back walls for NB and SB I-5

El Toro OH (Bridge No. 55-0221)

- Structure widening for NB I-5.
- Structure replacement for NB off-ramp to La Paz Road.

La Paz Road UC (Bridge No. 55-0234)

This alternative proposes to replace the La Paz Road UC structure to accommodate the wider La Paz Road cross-section under the structure and to improve the existing non-standard vertical clearance of 14 feet, 10 inches with the minimum required 15 feet. This includes replacement of the structure for the NB loop-on ramp from La Paz Road. In order to achieve minimum vertical clearance for this structure, a two-span structure is proposed to minimize the structure depth. No profile adjustment is proposed for either I-5 or La Paz Road. Additionally, to ensure that all existing mainline lanes are open through construction, the I-5 centerline will be realigned easterly approximately 77 feet to 85 feet through the interchange.

Alicia Parkway OC (Bridge No. 55-0591)

- Tie-back wall for NB I-5.

Aliso Creek UC (Bridge No. 55-0014)

- Structure widening for SB I-5.

Los Alisos Boulevard OC (Bridge No. 55-0631)

This alternative proposes to replace the Los Alisos Boulevard OC structure to accommodate the wider I-5 cross-section under the structure. No profile adjustment is proposed. Additionally, the new structure will be constructed to accommodate three future lanes in each direction on Los Alisos Boulevard, to be consistent with the ultimate lane configuration in the Master Plan of Arterial Highways (MPAH).

El Toro Road UC (Bridge No. 55-0235)

- Structure widening for NB and SB I-5.

Alternative 3

Alternative 3 is very similar in nature to Alternative 2, except that it proposes one additional general purpose lane from Avery Parkway to Alicia Parkway and a second additional general purpose lane from Crown Valley Parkway to Alicia Parkway.

Other differences from Alternative 2 are noted below.

Auxiliary Lanes

New auxiliary lanes will be constructed in the same locations as noted in Alternative 2.

Avery Parkway Interchange Improvements

Design options for the Avery Parkway interchange reconfiguration will be the same as those noted under Alternative 2.

La Paz Road Interchange Improvements

The La Paz Road interchange improvements will be the same as noted under Alternative 2.

Ramps

Ramp modifications will be the same as those noted under Alternative 2.

Structures

Modifications and improvements to structure are the same as those noted under Alternative 2, although they will widened further to accommodate the additional general purpose lane. Additional modifications are proposed for the following:

El Toro OH (Bridge No. 55-0221)

- Structure widening for SB I-5.

Type of Project *(use Table 1 on instruction sheet)*
Change to existing state highway.

County	**Narrative Location/Route & Postmiles**
Orange County	The proposed project is located within the cities of Laguna Hills, Laguna Niguel, Laguna Woods, Lake Forest, and Mission Viejo within the County of Orange, State of California. The proposed project's boundaries are from Post Mile (PM) 12.4 to PM 18.9. The total distance of the proposed project is approximately 6.5 miles. **Caltrans Projects – EA#** 0K0200

Lead Agency: California Department of Transportation, District 12

Contact Person	**Phone#**	**Fax#**	**Email**
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Hot Spot Pollutant of Concern *(check one or both)* **PM2.5 #X#** **PM10 #X#**

Federal Action for which Project-Level PM Conformity is Needed *(check appropriate box)*

Categorical Exclusion (NEPA)	**X**	**EA or Draft EIS**	**FONSI or Final EIS**	**PS&E or Construction**	**Other**

Scheduled Date of Federal Action: 2013

NEPA Delegation – Project Type *(check appropriate box)*

Exempt	**Section 6004 – Categorical Exemption**	**X**	**Section 6005 – Non-Categorical Exemption**

Current Programming Dates *(as appropriate)*

	PE/Environmental	**ENG**	**ROW**	**CON**
Start	10/2011	10/2011	4/2012	2018
End	5/2013	3/2013	9/2012	2022

Project Purpose and Need (Summary):

Purpose

The purpose of the I-5 Widening Project (proposed project) is to improve both existing and forecast mainline congestion on I-5 from SR-73 to El Toro Road and improve interchange operations on an interim basis. The following goals/objectives have also been identified for consideration within the project limits:

- Improve vehicle occupancy within the Study Area.
- Provide continuity of the HOV network within the proposed project limits.
- Improve ingress/egress from freeway ramps.
- Maximize use of the existing right-of-way to provide appropriate facility improvements.

Need for the Project

The I-5 corridor is the only major freeway connecting Los Angeles and Orange counties with San Diego County. The 2011

traffic volume for this corridor was approximately 358,000 vehicles per day and is expected to increase by approximately 25percent by 2045 bringing freeway volumes up to 448,000 vehicles per day[1]. Currently, this stretch of the I-5 corridor has insufficient capacity on the freeway mainline, interchange areas, on- and off-ramps, and local intersections to handle existing and projected 2045 travel demand in the Study Area. This condition also affects the traffic operation at the local interchanges with this segment of I-5. As a result, this corridor is operating with a condition of traffic demand exceeding capacity due to the following conditions:

- A high level of traffic during the weekdays as well as the weekends/holidays due to lack of capacity.
- Congestion at the freeway on- and off- ramps/intersections due to high traffic demands at the ramps.
- Congestion due to weaving and merging between the on- and off- ramps at several interchanges as a result of overall traffic volume.

Surrounding Land Use/Traffic Generators *(especially effect on diesel traffic)*

The proposed project is located within south Orange County and is immediately surrounded by residential, commercial, and institutional uses. Diesel truck traffic makes up approximately 3.5 percent of the total traffic volumes within the project limits.

Opening Year: Build and No Build LOS, AADT, % and # trucks, truck AADT of proposed facility

The project would maximize overall performance within the project limits; reduce congestion on I-5 within the project limits; provide intermittent auxiliary lanes, where needed, to relieve congestion at diverge and merge locations; minimize right-of-way acquisition; and relieve congestion within interchange areas, on- and off-ramps, and local intersections. Table 1 (Opening Year [2022] No Build Traffic Volumes) depicts the opening year traffic volumes along each segment within the project limits. As shown in Table 1, opening year average daily traffic (ADT) volumes range from 264,000 to 473,000, which include truck volumes that range from 9,240 to 16,555 ADT. Table 2 (Opening Year [2022] Build Alternative Traffic Volumes) provides the traffic volumes associated with both Build Alternatives. As indicated in Table 2, both Build Alternatives would have truck daily volumes up to 16,590. Although truck volumes exceed 10,000 ADT, this represents approximately 3.5 percent of the total vehicles on I-5. Additionally, the proposed project would result in an increase in truck volumes of less than one percent, except for the segment between Avery Parkway and Crown Valley Parkway, which would be 1.14 percent for Alternative 3.

Table 1
Opening Year (2022) No Build Traffic Volumes

Location	2022 No Build		
	ADT	% Trucks	# Trucks
I-5 Mainline			
Junipero Serra Road and SR-73	303,000	3.5	10,605
SR-73 and Avery Parkway	303,000	3.5	10,605
Avery and Crown Valley Parkway	264,000	3.5	9,240
Crown Valley Pky. and Oso Parkway	305,000	3.5	10,675
Oso Parkway and La Paz Road	320,000	3.5	11,200
La Paz Road and Alicia Parkway	348,000	3.5	12,180
Alicia Parkway and El Toro Road	385,000	3.5	13,475
El Toro Road and Lake Forest Drive	395,000	3.5	13,825
Lake Forest Drive and I-405	414,000	3.5	14,490
I-405 and Alton Parkway	473,000	3.5	16,555
ADT = Average Daily Traffic; I-5 = Interstate 5			
Source: Stantec, I-*5 Widening Project from SR-73 to El Toro Road PA/ED (EA 0K0200 EFIS 1200000318) Traffic Report*, June 2012.			

[1] I-5 Widening Project from SR-73 to El Toro Road PA/ED Traffic Study, June 2012. (Table 2-10)

Table 2
Opening Year (2022) Build Alternative Traffic Volumes

Location	2022 Build (Alternative 2)				2022 Build (Alternative 3)			
	ADT	% Trucks	# Trucks	# Trucks Percent Change	ADT	% Trucks	# Trucks	# Trucks Percent Change
I-5 Mainline								
Junipero Serra Road and SR-73	303,000	3.5	10,605	0	304,000	3.5	10,640	0.33
SR-73 and Avery Parkway	303,000	3.5	10,605	0	304,000	3.5	10,640	0.33
Avery and Crown Valley Parkway	266,000	3.5	9,310	0.76	267,000	3.5	9,345	1.14
Crown Valley Pky. and Oso Parkway	307,000	3.5	10,745	0.66	307,000	3.5	10,745	0.66
Oso Parkway and La Paz Road	322,000	3.5	11,270	0.63	323,000	3.5	11,305	0.94
La Paz Road and Alicia Parkway	350,000	3.5	12,250	0.57	351,000	3.5	12,285	0.86
Alicia Parkway and El Toro Road	387,000	3.5	13,545	0.52	388,000	3.5	13,580	0.78
El Toro Road and Lake Forest Drive	396,000	3.5	13,860	0.25	396,000	3.5	13,860	0.25
Lake Forest Drive and I-405	415,000	3.5	14,525	0.24	415,000	3.5	14,525	0.24
I-405 and Alton Parkway	474,000	3.5	16,590	0.21	474,000	3.5	16,590	0.21
ADT = Average Daily Traffic; I-5 = Interstate 5								
Source: Stantec, I-*5 Widening Project from SR-73 to El Toro Road PA/ED (EA 0K0200 EFIS 1200000318) Traffic Report*, June 2012.								

Table 3 (Opening Year Level of Service – No Build) and Table 4 (Opening Year Level of Service – Build Alternatives) summarize the existing delay and corresponding Level of Service (LOS) within the project area. As shown in Table 3 and Table 4, LOS would generally improve (i.e., delay would be reduced).

Table 3
Opening Year Level of Service – No Build

Location	2022 No Build (Alternative 1)			
	AM Peak Hour		PM Peak Hour	
	Delay	LOS	Delay	LOS
El Toro Road & I-5 NB Ramps[1]	31.2	C	48.2	D
I-5 SB Ramps & Avenida de la Carlota[1]	25.8	C	43.2	D
I-5 NB Ramps & Alicia Parkway	9.0	A	17.8	B
I-5 SB Ramps & Alicia Parkway	28.0	C	45.8	D
I-5 NB Ramp/Muirlands & La Paz	25.1	C	31.7	C
I-5 SB Ramps/Cabot Road & La Paz Road	35.8	D	45.6	D
I-5 NB Ramps & Oso Parkway	17.4	B	34.1	C
I-5 SB Ramps & Oso Parkway	11.3	B	20.0	C
I-5 NB Ramps & Crown Valley Parkway[1]	30.5	C	27.1	C
I-5 SB Ramps & Crown Valley Parkway[1]	36.2	D	65.1	E[1]
I-5 NB Ramps & Avery Parkway	18.4	B	17.3	B
I-5 SB Ramps & Avery Parkway	16.3	B	30.4	C
Notes: 1. Location with LOS E as maximum acceptable LOS.				

Table 4
Opening Year Level of Service – Build Alternatives

Location	2022 Build (Alternative 2)				2022 Build (Alternative 3)			
	AM Peak Hour		PM Peak Hour		AM Peak Hour		PM Peak Hour	
	Delay	LOS	Delay	LOS	Delay	LOS	Delay	LOS
El Toro Road & I-5 NB Ramps[1]	26.4	C	25.7	C	26.6	C	25.7	C
I-5 SB Ramps & Avenida de la Carlota[1]	25.8	C	38.2	D	25.3	C	38.0	D
I-5 NB Ramps & Alicia Parkway	8.9	A	17.5	B	9.3	A	17.5	B
I-5 SB Ramps & Alicia Parkway	22.2	C	32.7	C	22.4	C	32.8	C
I-5 NB Ramp/Muirlands & La Paz	21.7	C	26.9	C	21.4	C	28.7	C
I-5 SB Ramps/Cabot Road & La Paz Road	27.3	C	42.0	D	28.1	C	41.6	D
I-5 NB Ramps & Oso Parkway	17.4	B	33.2	C	17.4	B	33.6	C
I-5 SB Ramps & Oso Parkway	11.3	B	22.1	C	11.4	B	23.0	C
I-5 NB Ramps & Crown Valley Parkway[1]	10.7	B	10.3	B	10.9	B	10.0	B
I-5 SB Ramps & Crown Valley Parkway[1]	360	D	62.8	E[1]	37.2	D	62.6	E[1]
I-5 NB Ramps & Avery Parkway (Option A)	14.3	B	14.6	B	14.3	B	14.5	B
I-5 NB Ramps & Avery Parkway (Option B)	19.0	B	14.0	B	17.6	B	14.0	B
I-5 SB Ramps & Avery Parkway (Option A)	15.6	B	16.7	B	15.7	B	16.7	B
16b. I-5 SB Ramps & Avery Parkway (Option B)	15.0	B	17.5	B	15.8	B	17.1	B

Notes:
1. Location with LOS E as maximum acceptable LOS.

RTP Horizon Year / Design Year: Build and No Build LOS, AADT, % and # trucks, truck AADT of proposed facility

Table 5 (Future Year 2045 Traffic Volumes – No Build) provides the 2045 volumes for Alternative 1, and Table 6 (Future Year 2045 Traffic Volumes – Build Alternatives) compares Alternative 2 and 3 traffic volumes along each freeway segment. As shown in Table 5 and 6, traffic volumes within the project limits exceed 125,000 vehicles daily. The percentage of trucks along this corridor is 3.5 percent, which is below the national average of eight percent[2]. Based on the Caltrans document entitled *California Statewide PM Hot Spot Procedures* (dated October 19, 2007), a "significant increase" of diesel vehicles (trucks) is 5 percent when comparing Build with No Build alternatives. As depicted in Table 6, the greatest increase in truck volumes would be 2.28 percent. The average increase among all segments within the project limits would be 1.5 percent. Although the proposed improvements would not affect truck travel in the project area, the proposed project would include the addition of general purpose lanes.

Table 5
Future Year 2045 Traffic Volumes – No Build

Roadway Segment	Alternative 1 (No Build)	
	ADT	Truck ADT
I-5 Mainline		
Ortega Highway and Junipero Serra Road	338,300	11,841
Junipero Serra Road and SR-73	352,700	12,345
SR-73 and Avery Parkway	295,500	10,343
Avery and Crown Valley	307,000	10,745
Crown Valley Parkway and Oso Parkway	350,700	12,275
Oso Parkway and La Paz Road	367,200	12,852
La Paz Road and Alicia Parkway	400,400	14,014
Alicia Parkway and El Toro Road	441,100	15,439
El Toro Road and Lake Forest Drive	457,100	15,999
Lake Forest Drive and I-405	358,400	12,544
I-405 and Alton Parkway	227,900	7,977
Alton Parkway and SR-133	324,400	11,354

Source: Stantec, I-5 *Widening Project from SR-73 to El Toro Road PA/ED (EA 0K0200 EFIS 1200000318) Traffic Report*, June 2012.

[2] Federal Highway Administration, *Highway Statistics 2004*, March 2006.

Table 6
Future Year 2045 Traffic Volumes – Build Alternatives

Roadway Segment	Alternative 2 (Build)			Alternative 3 (Build)		
	ADT	Truck ADT	# Trucks Percent Change	ADT	Truck ADT	# Trucks Percent Change
I-5 Mainline						
Ortega Highway and Junipero Serra Road	339,600	11,886	0.38	340,200	11,907	0.56
Junipero Serra Road and SR-73	354,000	12,390	0.36	354,600	12,411	0.54
SR-73 and Avery Parkway	301,000	10,535	1.86	302,100	10,574	2.23
Avery and Crown Valley	312,700	10,945	1.86	314,000	10,990	2.28
Crown Valley Parkway and Oso Parkway	356,600	12,481	1.68	358,000	12,530	2.08
Oso Parkway and La Paz Road	373,400	13,069	1.69	374,900	13,122	2.10
La Paz Road and Alicia Parkway	406,900	14,242	1.63	408,400	14,294	2.00
Alicia Parkway and El Toro Road	448,000	15,680	1.56	449,500	15,733	1.90
El Toro Road and Lake Forest Drive	460,700	16,125	0.79	461,700	16,160	1.01
Lake Forest Drive and I-405	361,000	12,635	0.73	361,500	12,653	0.86
I-405 and Alton Parkway	230,500	8,068	1.14	231,000	8,085	1.36
Alton Parkway and SR-133	327,000	11,445	0.80	327,500	11,463	0.96

Source: Stantec, I-*5 Widening Project from SR-73 to El Toro Road PA/ED (EA 0K0200 EFIS 1200000318) Traffic Report*, June 2012.

Table 7 (Future Year Level of Service – No Build) and Table 8 (Future Year Level of Service – Build Alternatives) summarize the existing delay and corresponding LOS within the project area. As shown in Table 7 and Table 8, LOS would generally improve (i.e., delay would be reduced).

Table 7
Future Year Level of Service – No Build

Location	2045 No Build (Alternative 1)			
	AM Peak Hour		PM Peak Hour	
	Delay	LOS	Delay	LOS
El Toro Road & I-5 NB Ramps[1]	45.9	D	82.0	F[1]
I-5 SB Ramps & Avenida de la Carlota[1]	34.0	C	97.1	F
I-5 NB Ramps & Alicia Parkway	14.4	B	30.4	C
I-5 SB Ramps & Alicia Parkway	66.6	E	100.5	F
I-5 NB Ramp/Muirlands & La Paz	43.5	D	54.5	D
I-5 SB Ramps/Cabot Road & La Paz Road	85.8	F	80.5	F
I-5 NB Ramps & Oso Parkway	19.9	B	40.1	D
I-5 SB Ramps & Oso Parkway	13.0	B	24.4	C
I-5 NB Ramps & Crown Valley Parkway[1]	38.2	D	37.8	D
I-5 SB Ramps & Crown Valley Parkway[1]	47.5	D	102.5	F
I-5 NB Ramps & Avery Parkway (Option A)	22.3	C	40.9	D
I-5 NB Ramps & Avery Parkway (Option B)	22.3	C	40.9	D
I-5 SB Ramps & Avery Parkway (Option A)	21.9	C	56.1	E
16b. I-5 SB Ramps & Avery Parkway (Option B)	21.9	C	56.1	E

Notes:
1. Location with LOS E as maximum acceptable LOS.

Table 8
Horizon Year Level of Service – Build Alternatives

Location	2045 Build (Alternative 2)				2045 Build (Alternative 3)			
	AM Peak Hour		PM Peak Hour		AM Peak Hour		PM Peak Hour	
	Delay	LOS	Delay	LOS	Delay	LOS	Delay	LOS
El Toro Road & I-5 NB Ramps[1]	31.1	C	28.4	C	32.0	C	27.5	C
I-5 SB Ramps & Avenida de la Carlota[1]	30.2	C	81.6	F	31.4	C	80.2	F
I-5 NB Ramps & Alicia Parkway	10.9	B	30.9	C	14.8	B	30.2	C
I-5 SB Ramps & Alicia Parkway	59.9	E	102.1	F	51.7	D	103.0	F
I-5 NB Ramp/Muirlands & La Paz	23.2	C	41.4	D	22.8	C	51.2	D
I-5 SB Ramps/Cabot Road & La Paz Road	69.3	E	63.2	E	76.5	E	60.6	E
I-5 NB Ramps & Oso Parkway	18.6	B	39.8	D	18.1	B	43.7	D
I-5 SB Ramps & Oso Parkway	12.7	B	27.4	C	13.3	B	30.0	C
I-5 NB Ramps & Crown Valley Parkway[1]	37.8	D	24.4	C	38.0	D	26.1	C
I-5 SB Ramps & Crown Valley Parkway[1]	45.1	D	103.6	F	47.0	D	103.7	F
I-5 NB Ramps & Avery Parkway (Option A)	14.7	B	14.9	B	14.5	B	14.6	B
I-5 NB Ramps & Avery Parkway (Option B)	20.4	C	15.9	B	20.2	C	15.6	B
I-5 SB Ramps & Avery Parkway (Option A)	18.9	B	17.6	B	18.9	B	17.8	B
16b. I-5 SB Ramps & Avery Parkway (Option B)	15.7	B	20.7	C	16.2	B	21.4	C

Notes:
1. Location with LOS E as maximum acceptable LOS.

Opening Year: If facility is an interchange(s) or intersection(s), Build and No Build cross-street AADT, % and # trucks, truck AADT

See Above.

RTP Horizon Year / Design Year: If facility is an interchange(s) or intersection(s), Build and No Build cross-street AADT, % and # trucks, truck AADT

See Above.

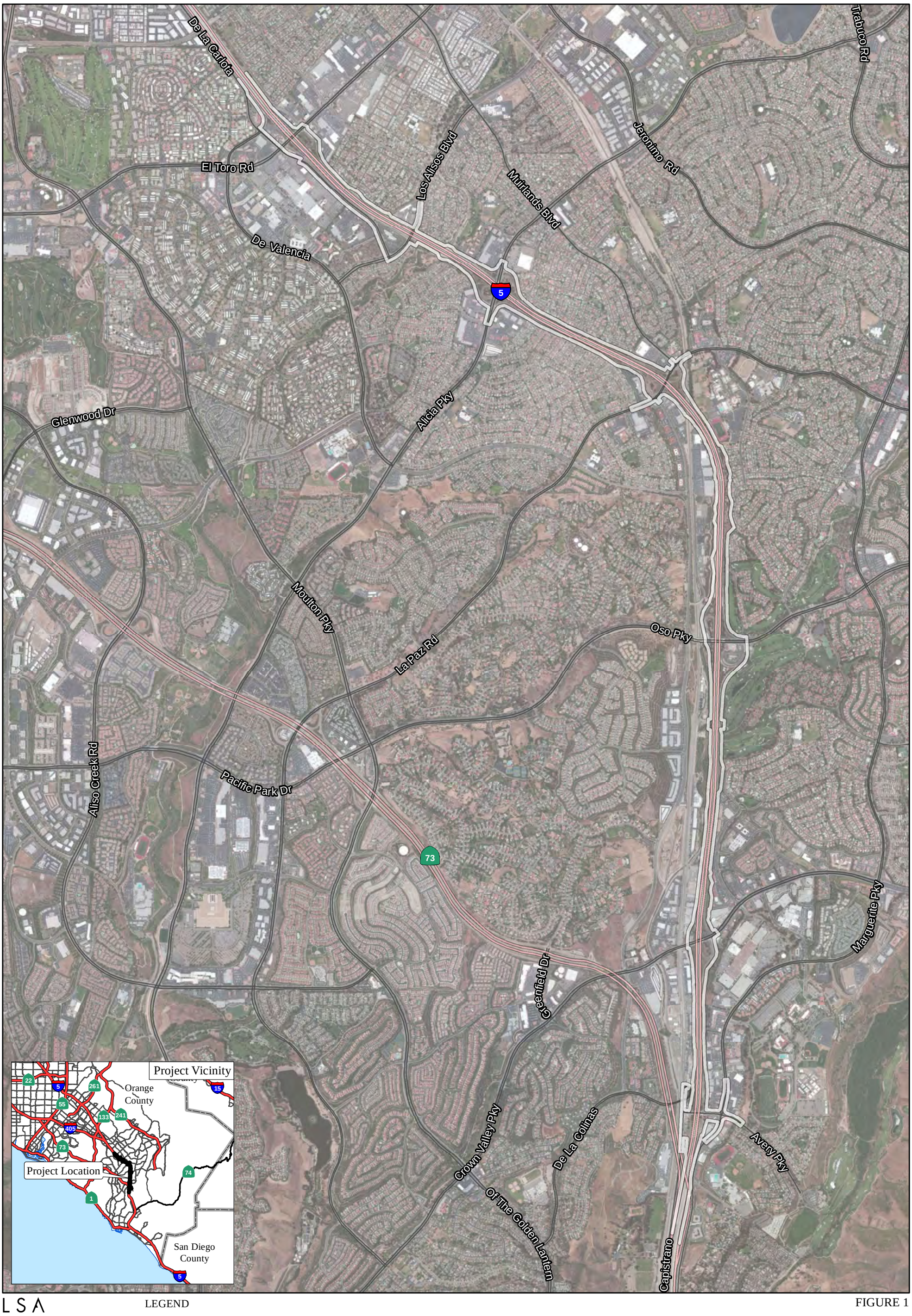
Describe potential traffic redistribution effects of congestion relief *(impact on other facilities)*

The proposed project would provide additional capacity and improve the overall operational performance of the I-5 within the project limits. The project would maximize overall performance within the project limits; reduce congestion on I-5 within the project limits; provide intermittent auxiliary lanes, where needed, to relieve congestion at diverge and merge locations; minimize right-of-way acquisition; and relieve congestion within interchange areas, on- and off-ramps, and local intersections. The proposed project would not divert to other routes, and the travel demand volume is not predicted to vary significantly between the build and no-build conditions. Thus, local traffic would not be significantly redistributed.

Comments/Explanation/Details *(attach additional sheets as necessary)*

The proposed project would not conflict with an applicable plan, policy, or regulation of an agency with jurisdiction over the project. The proposed project is also consistent with Southern California Association of Governments (SCAG) Regional Transportation Plan (RTP) and Federal Transportation Improvement Program (FTIP) (RTP ID 2M0730 and FTIP ID ORA111801) and is intended to meet the traffic needs in the area based on local land use plans.

Per the criteria under 40 CFR 93.123(b)(1), the proposed project would potentially qualify as project of local air quality concern (POAQC). The project would be considered a "new or expanded highway projects that have a significant number of or significant increase in diesel vehicles" per 40 CFR 93.123(b)(1). Among the proposed project improvements, the project would add a general purpose lane to I-5 to expand an existing highway. Existing ADT volumes for each freeway segment within the project study area range from 182,500 to 364,600 ADT, which includes truck volumes that range from 6,388 to 12,761 ADT. Opening Year ADT volumes range from 264,100 to 473,000 ADT, which includes truck volumes that range from 9,240 to 16,555 ADT. Traffic volumes along I-5 exceed the EPA and FHWA's POAQC guideline of 125,000 ADT. Traffic volumes along I-5 exceed the EPA and FHWA's POAQC guideline of 125,000 ADT. Due to the highway expansion and the significant volume of vehicles, the proposed project has the potential to be a POAQC.



LSA

LEGEND

Maximum Disturbance Limits (for Alternative 2 & 3)

FIGURE 1

0 1125 2250
FEET

SOURCE: Bing Maps (c.2008)

I:\TSY1102\GIS\ProjectLocation_aerial.mxd (8/9/2012)

I-5 Widening Project: SR-73 to El Toro Road

Project Location